

Claims

1.

1 A method of forming a cap for a container, comprising the steps of:
2 molding a polymeric container to form the container and a flash section
3 integral with the container;
4 forming at least one cap in the flash section; and
5 separating the cap from the flash section to form a separate cap.

2.

1 The method of claim 1 wherein the molding step comprises blow molding
2 the container within a mold die having two mold halves with the flash section defined at
3 least in part between the mold halves.

3.

1 The method of claim 2 wherein at least one of the halves has a projection
2 adapted to provide a recess in the flash section with the recess defining a portion of the
3 cap when it is separated from the flash section.

4.

1 The method of claim 1 wherein the container and flash section are formed
2 from multiple layers of material.

5.

1 The method of claim 1 wherein the container and cap have a vapor barrier
2 layer disposed between inner and outer layers of a different material.

6.

1 A fuel tank, comprising:

2 a tank wall formed from multiple layers of polymeric material including at
3 least one structural layer and at least one vapor barrier layer, at least one flash section to
4 be removed from the tank wall, and an opening through the tank wall; and

5 a cap formed from the material of said at least one flash section fixed to the
6 tank wall to cover the opening.

7.

1 The fuel tank of claim 6 wherein the tank wall and the cap each have an
2 inner layer, an outer layer and a vapor barrier layer disposed between the inner and outer
3 layers.

8.

1 The fuel tank of claim 7 wherein at least one of the inner layer and outer
2 layers of the cap are weldable to permit the cap to be welded to the tank wall.

9.

1 The fuel tank of claim 8 wherein the inner layer and outer layer are formed
2 from a polyethylene.

10.

1 A method of forming a container and cap, comprising the steps of:
2 providing a parison within a pair of open mold halves each defining in part
3 a mold cavity;
4 closing the mold halves together;
5 providing a pressurized fluid into the parison within the closed mold halves
6 to expand the parison within the mold cavity and to form and define the shape of the
7 container;
8 forming at least one flash section between the mold halves;
9 forming at least one cap in the flash section; and
10 separating the cap from the flash section.

11.

1 The method of claim 10 which also comprises the step of providing an
2 opening in the container and sealing the cap to the container to close the opening.

12.

1 The method of claim 11 wherein the cap is welded to the tank.

13.

1 The method of claim 10 wherein the flash sections and the container are
2 formed simultaneously.

14.

1 A cap for a polymeric fuel tank, comprising:
2 a body formed from at least one layer of a polymeric material suitable for
3 attachment in sealed relationship to the fuel tank and two vapor barrier layers constructed
4 to at least restrict the permeation of fuel vapor therethrough.

15.

1 The cap of claim 14 wherein the body has at least two layers of polymeric
2 material with the vapor barrier layers disposed between them.

16.

1 The cap of claim 14 wherein each vapor barrier layer is disposed between
2 a pair of layers of polymeric material with at least one layer of polymeric material
3 disposed between the vapor barrier layers.

17.

1 A blow mold, comprising:

2 a pair of mating die halves each having a recess defining a main mold cavity
3 when the die halves are mated in which an article is molded a second cavity defined
4 between the mated die halves separate from the main mold cavity and in which a flash
5 section is formed to form a cap.

18.

1 The blow mold of claim 17 wherein the second cavity is defined by
2 cooperating recesses formed in each die half.

19.

1 The blow mold of claim 18 wherein an annular recess is defined in one die
2 half and a generally circular recess is defined in the other die half.

20.

1 The blow mold of claim 18 wherein a generally circular recess is defined
2 in each die half.

21.

1 The blow mold of claim 17 wherein the second cavity is defined in a gap
2 between the die halves.

2. which also comprises
y to define a recess

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